

**LANDING GEAR METHOD AND APPARATUS
FOR BRAKING AND MANEUVERING**

ABSTRACT

[00049] Aircraft landing gear comprised of a wheel hub motor/generator disks stack, includes alternating rotor and stator disks mounted with respect to the wheel support and wheel. The wheel hub motor/generator can provide motive force to the wheel when electrical power is applied, which may be applied prior to touch-down thus decreasing the difference in relative velocities of the tire radial velocity with that of the relative velocity of the runway thus greatly reducing the sliding friction wear of said tire. After touchdown the wheel hub motor/generator may be used as a generator thus applying a regenerative braking force and/or a motorized braking action to the wheel. The energy generated upon landing maybe dissipated through a resistor and/or stored for later use in providing a source for motive power to the aircraft wheels for the purpose of taxiing and ground maneuvers of said aircraft.